The NCI Center for Biomedical Informatics and Information Technology (CBIIT) Speaker Series presents talks from innovators in the research and informatics community. The biweekly presentations allow thought leaders to share their work and discuss trends across a diverse set of domains and interests. The goals of the Speaker Series are: to share leading edge research; to inform the community of new tools, trends, and ideas; to inspire innovation; and to provide a forum from which new collaborations can begin.

Speakers represent many different institutions, and the topics they address are wide-ranging. View a list of all past speakers, and view their presentations on our NCI CBIIT Speaker Series YouTube playlist!

For help accessing NCI CBIIT Speaker Series files, go to Help Downloading Files.

Location: 9609 Medical Center Drive, Rockville, Maryland 20850

Speaker Series Guidelines for Speakers: Download Word document

Questions or suggestions? If you have questions or would like to recommend a speaker, please email Eve Shalley at eve.shalley@nih.gov

Please refer to the Speaker Calendar below for upcoming speakers.

Upcoming Speakers:

December 5, 2018: Samir Courdy, Huntsman Cancer Institute, and Joyce Niland, City of Hope

December 19, 2018: Rob Smith, University of Montana

January 16, 2019: Chunlei Wu, The Scripps Institute

An invitation: If you are interested in presenting your work to our diverse audience of informaticists; basic, translational, and clinical researchers; software developers; and others interested in exploring the uses of informatics in cancer research, contact Eve Shalley at eve.shalley@nih.gov or 240-276-5194.

CBIIT and NCIP

Links

- CBIIT website
- NCIP landing page
- NCI Biomedical Informatics Blog
- NCIP on Twitter @NCI_NCIP

CBIIT Speakers

Dec 5, Samir Courdy and Joyce Niland, Building NLP Processes for Auto Extraction of Data from Clinical Reports

Warmington, Christina (NIH/NCI) [C] posted on Nov 02, 2018
Definite diagnosis of cancer presence or recurrence is currently only possible via invasive biopsy or surgical intervention. Unfortunately, invasive biopsy, (a) in many cases is unnecessary due to absence of the disease, (b) have sampling errors depending on where the tissue sample is acquired from, and (c) could have irreparable and life-threatening side effects including mortality. Recently, artificial intelligence and radiomics have shown tremendous promise in leveraging imaging to non-invasively capture the landscape of tissue heterogeneity, previously not feasible by visual inspection. Similarly, one would leverage -omics and pathology information in conjunction with routine imaging to establish cross-scale associations towards designing more optimized personalized treatment options for cancer treatment.

In this talk, I will focus on my lab's recent efforts in developing radiomic (extracting computerized sub-visual features from radiologic imaging), radio-genomic (identifying radiologic features associated with molecular phenotypes), and radio-pathomic (radiologic features associated with pathologic phenotypes) techniques to capture insights into the underlying tumor biology as observed on non-invasive routine imaging. I will focus on clinical applications of this work for predicting disease outcome, recurrence, progression and response to therapy specifically in the context of brain tumors. I will also discuss our current efforts in developing new radiomic features for post-treatment evaluation and predicting response to chemo-radiation treatment. I will conclude with a discussion on our recent findings in AI + experts, in the context of a clinically challenging problem of distinguishing benign radiation effects from tumor recurrence on routine MRI scans.
Complete List of Update Posts

Speaker Calendar

Team Calendars